

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
4 August 2005 (04.08.2005)

PCT

(10) International Publication Number
WO 2005/070402 A1

(51) International Patent Classification⁷: **A61K 31/00**

(21) International Application Number: **PCT/KR2005/000045**

(22) International Filing Date: 7 January 2005 (07.01.2005)

(25) Filing Language: **Korean**

(26) Publication Language: **English**

(30) Priority Data:
10-2004-0001207 8 January 2004 (08.01.2004) KR

(71) Applicant (for all designated States except US): **NEWTREE INDUSTRY CO., LTD. [KR/KR]**; Bundang Technopark #D-902, 151, Yatap-dong, Bundang-gu, Sungnam, Gyeonggi-do 463-070 (KR).

(71) Applicant and
(72) Inventor: **HWANG, Jae-Kwan [KR/KR]**; Dahlvit maeul Apt. #109-604, 858, Hwajeong-dong, Deokyang-gu, Goyang, Gyeonggi-do 412-270 (KR).

(72) Inventors; and
(75) Inventors/Applicants (for US only): **CHUNG, Jae-Youn**

[KR/KR]; Jinheung Apt. #3-1006, Seocho 4-dong, Seocho-gu, Seoul 137-776 (KR). **CHUNG, Hee-Chul** [KR/KR]; Poongrim Apt. #302-1502, Seongjeo maeul, Daehwa-dong, Ilsan-gu, Goyang, Gyeonggi-do 411-703 (KR). **PARK, Kyung-Min** [KR/KR]; Jakeungoongjeon Apt. #101, 167-8 Sam-dong, Gwangju, Gyeonggi-do 464-805 (KR).

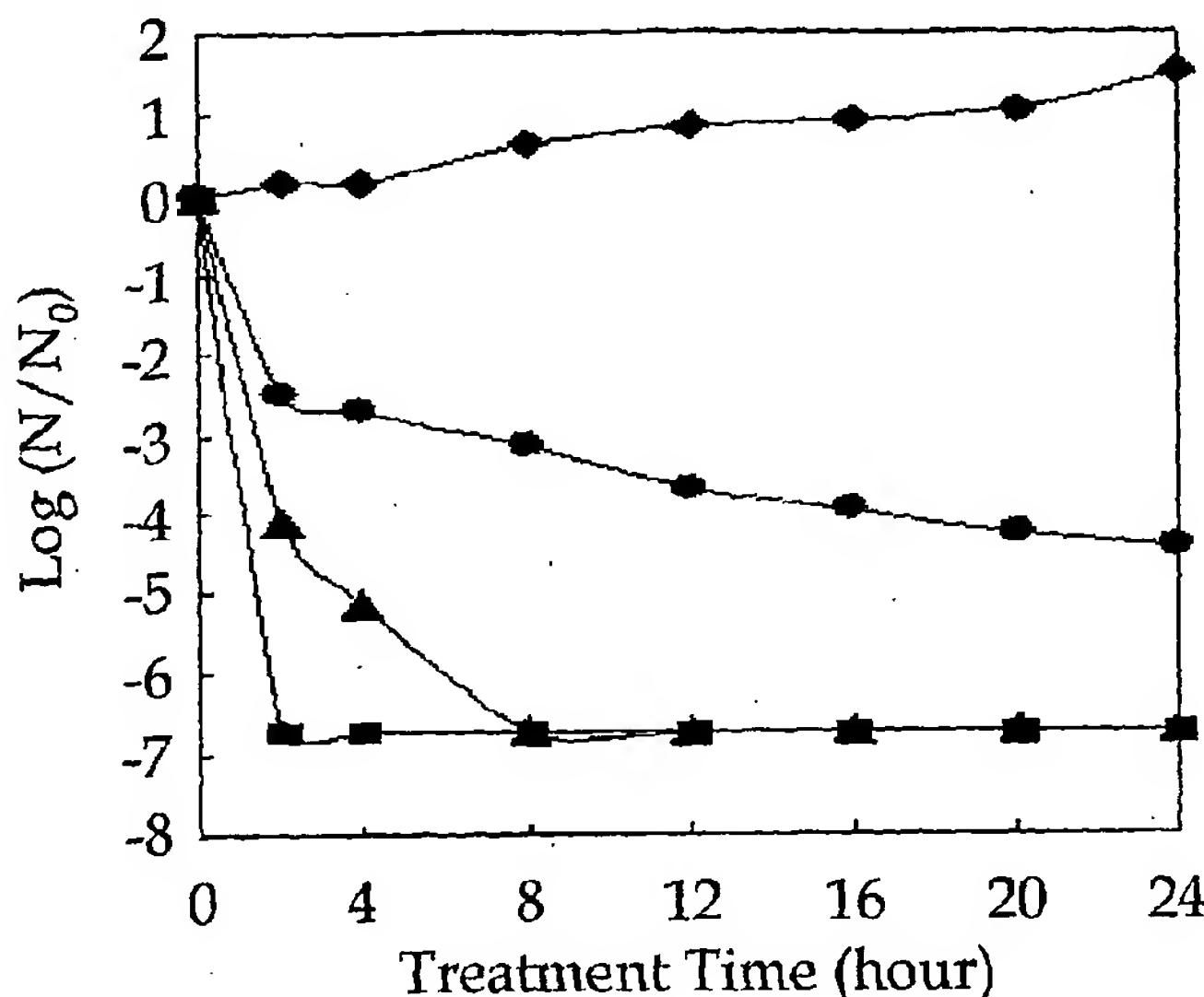
(74) Agent: **KIM, Seog-Hyun**; 9th Floor, Daekyung Building, 120, 2-ka, Taepyung-ro, Chung-ku, Seoul 100-724 (KR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CI, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: METHOD AND COMPOSITION FOR TREATING ACNE USING LIGNAN COMPOUNDS



(57) Abstract: The present invention relates to a method and composition for treating acne using lignan compounds represented by Formula 1. More particularly, the invention relates to an antibacterial composition against acne-causing bacteria, containing lignan compounds represented by Formula 1, as well as a method for treating acne using the same. The lignan compounds represented by Formula 1 are excellent not only in the antibacterial activity of inhibiting the growth of acne-causing bacteria, but also in thermal stability. Accordingly, the lignan compounds may be useful as antibacterial agents against the acne-causing bacteria, and acne treatment agents.

WO 2005/070402 A1



European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- *with international search report*